

Clean Screen_Winter

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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1.2. Relevant identified uses of the substance or mixture and uses advised against**1.3. Details of the supplier of the safety data sheet**

| | | |
|-------------------------|--|------------------------------------|
| Company name: | Vierol AG | |
| Street: | Karlstrasse 19 | |
| Place: | D-26123 Oldenburg | |
| Telephone: | +49 (0) 441 – 210 20 – 0 | Telefax: +49 (0) 441 – 210 20 –111 |
| e-mail: | info@vierol.de | |
| Internet: | www.vierol.de | |
| Responsible Department: | Giftinformationszentrum Nord (Göttingen) | |
| | +49 (0)551/19240 | |

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Flammable liquid: Flam. Liq. 3

Hazard Statements:

Flammable liquid and vapour.

2.2. Label elements**Regulation (EC) No. 1272/2008**

Signal word: Warning

Pictograms:

**Hazard statements**

Flammable liquid and vapour.

Precautionary statements

Dispose of contents/container to industrial incineration plant.

Store in a well-ventilated place. Keep cool.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Wear protective gloves/protective clothing/eye protection/face protection.

Take action to prevent static discharges.

Use non-sparking tools.

Use explosion-proof electrical/ventilating/lighting equipment.

Ground and bond container and receiving equipment.

Keep container tightly closed.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep out of reach of children.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

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3.2. Mixtures**Hazardous components**

| CAS No | Chemical name | | | Quantity |
|------------|---|--------------|----------|----------|
| | EC No | Index No | REACH No | |
| | Classification according to Regulation (EC) No. 1272/2008 [CLP] | | | |
| 64-17-5 | ethanol, ethyl alcohol | | | 60-<65 % |
| | 200-578-6 | 603-002-00-5 | | |
| | Flam. Liq. 2; H225 | | | |
| 107-21-1 | ethanediol, ethylene glycol | | | 10-<15 % |
| | 203-473-3 | 603-027-00-1 | | |
| | Acute Tox. 4; H302 | | | |
| 68585-34-2 | Alkylethersulfat, Natriumsalz 28% | | | <0,1 % |
| | | | | |
| | Skin Irrit. 2; Eye Irrit. 2; H315 H319 | | | |

Full text of H and EUH statements: see section 16.

Labelling for contents according to Regulation (EC) No 648/2004

< 5 % anionic surfactants.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Self-protection of the first aider Remove casualty to fresh air and keep warm and at rest. Change contaminated, saturated clothing.

After inhalation

Provide fresh air. If unconscious place in recovery position and seek medical advice.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After ingestion

Rinse mouth immediately and drink plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**Water spray jet0 Carbon dioxide (CO2)0 Foam0 Extinguishing powder. In case of major fire and large quantities:
Water spray jet**Unsuitable extinguishing media**

Full water jet

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5.2. Special hazards arising from the substance or mixture

Flammable. Vapours can form explosive mixtures with air. In case of fire may be liberated: Carbon dioxide (CO₂). Sulphur dioxide (SO₂) Nitrogen oxides (NO_x)

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Full protection suit

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Protective equipment Remove persons to safety. Provide adequate ventilation. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Keep container tightly closed. Store in a cool dry place. Keep away from heat. Protect from sunlight. Provide adequate ventilation as well as local exhaust at critical locations.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on storage compatibility

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

Further information on storage conditions

Store in a cool dry place.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

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Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|----------|-------------------------|------|-------------------|-----------|---------------|--------|
| 107-21-1 | Ethane-1,2-diol, vapour | 20 | 52 | | TWA (8 h) | WEL |
| | | 40 | 104 | | STEL (15 min) | WEL |
| 64-17-5 | Ethanol | 1000 | 1920 | | TWA (8 h) | WEL |
| | | - | - | | STEL (15 min) | WEL |

8.2. Exposure controls**Protective and hygiene measures**

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink. Change contaminated, saturated clothing. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. When using do not eat, drink or smoke.

Eye/face protection

Wear eye protection/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. DIN EN 374 Suitable gloves type: NBR (Nitrile rubber)

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | |
|----------------------|----------------|
| Physical state: | Liquid |
| Colour: | blue |
| Odour: | characteristic |
| pH-Value (at 20 °C): | 8 |

Changes in the physical state

| | |
|--|----------|
| Melting point: | -63,5 °C |
| Initial boiling point and boiling range: | 78 °C |
| Flash point: | 23 °C |

Flammability

| | |
|--------|----------------|
| Solid: | not applicable |
| Gas: | not applicable |

Explosive properties

The product is not: Explosive In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

| | |
|-------------------------|------------|
| Lower explosion limits: | 3,2 vol. % |
|-------------------------|------------|

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| | |
|---|-------------------------|
| Upper explosion limits: | 15,3 vol. % |
| Ignition temperature: | 410 °C |
| Auto-ignition temperature | |
| Solid: | not applicable |
| Gas: | not applicable |
| Decomposition temperature: | not determined |
| Oxidizing properties | |
| No self-ignition up to the melting point. | |
| Vapour pressure: (at 20 °C) | 59 hPa |
| Density (at 20 °C): | 0,915 g/cm ³ |
| Water solubility: | easily soluble |
| Solubility in other solvents | |
| not determined | |
| Partition coefficient: | not determined |
| Vapour density: | not determined |
| Evaporation rate: | not determined |
| <u>9.2. Other information</u> | |
| Solid content: | not determined |

SECTION 10: Stability and reactivity**10.1. Reactivity**

Flammable. No information available.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Carbon monoxide

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity**

Based on available data, the classification criteria are not met.

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| CAS No | Chemical name | | | | |
|----------|-----------------------------|---------------------|---------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 64-17-5 | ethanol, ethyl alcohol | | | | |
| | oral | LD50 mg/kg 6200 | Rat | IUCLID | |
| | inhalative (4 h) vapour | LC50 95,6 mg/l | Rat | RTECS | |
| 107-21-1 | ethanediol, ethylene glycol | | | | |
| | oral | ATE 500 mg/kg | | | |
| | dermal | LD50 mg/kg 10600 | Rabbit | GESTIS | |

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information**12.1. Toxicity**

The product is not: Ecotoxic.

| CAS No | Chemical name | | | | | |
|---------|--------------------------|---------------------------|-----------|---------------|--------|--------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 64-17-5 | ethanol, ethyl alcohol | | | | | |
| | Acute crustacea toxicity | EC50 9268 - 14221 mg/l | 48 h | Daphnia magna | IUCLID | |

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|----------|-----------------------------|---------|
| 64-17-5 | ethanol, ethyl alcohol | -0,31 |
| 107-21-1 | ethanediol, ethylene glycol | -1,36 |

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

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Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods**Advice on disposal**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Waste disposal number of used product

070704 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors; hazardous waste

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

| | |
|--|------------------|
| 14.1. UN number: | UN 1987 |
| 14.2. UN proper shipping name: | ALCOHOLS, N.O.S. |
| 14.3. Transport hazard class(es): | 3 |
| 14.4. Packing group: | III |
| Hazard label: | 3 |



| | |
|--------------------------|---------|
| Classification code: | F1 |
| Special Provisions: | 274 601 |
| Limited quantity: | 5 L |
| Excepted quantity: | E1 |
| Transport category: | 3 |
| Hazard No: | 30 |
| Tunnel restriction code: | D/E |

Inland waterways transport (ADN)

| | |
|--|------------------|
| 14.1. UN number: | UN 1987 |
| 14.2. UN proper shipping name: | ALCOHOLS, N.O.S. |
| 14.3. Transport hazard class(es): | 3 |
| 14.4. Packing group: | III |
| Hazard label: | 3 |



| | |
|----------------------|---------|
| Classification code: | F1 |
| Special Provisions: | 274 601 |
| Limited quantity: | 5 L |
| Excepted quantity: | E1 |

Marine transport (IMDG)

| | |
|---------------------------------------|------------------|
| 14.1. UN number: | UN 1987 |
| 14.2. UN proper shipping name: | ALCOHOLS, N.O.S. |

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14.3. Transport hazard class(es): 3**14.4. Packing group:** III

Hazard label: 3



Special Provisions: 223, 274

Limited quantity: 5 L

Excepted quantity: E1

EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)**14.1. UN number:** UN 1987**14.2. UN proper shipping name:** ALCOHOLS, N.O.S.**14.3. Transport hazard class(es):** 3**14.4. Packing group:** III

Hazard label: 3



Special Provisions: A3 A180

Limited quantity Passenger: 10 L

Passenger LQ: Y344

Excepted quantity: E1

IATA-packing instructions - Passenger: 355

IATA-max. quantity - Passenger: 60 L

IATA-packing instructions - Cargo: 366

IATA-max. quantity - Cargo: 220 L

14.6. Special precautions for user

Warning: Combustible liquid.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

2010/75/EU (VOC): 64,99 % (594,659 g/l)

2004/42/EC (VOC): 79,98 % (731,817 g/l)

Additional information

Regulation (EC) No. 648/2004 (Detergents regulation).

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

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Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

| Classification | Classification procedure |
|--------------------|--------------------------|
| Flam. Liq. 3; H226 | On basis of test data |

Relevant H and EUH statements (number and full text)

Highly flammable liquid and vapour.
 Flammable liquid and vapour.
 Harmful if swallowed.
 Causes skin irritation.
 Causes serious eye irritation.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)